



Launch Mission Execution Forecast

Mission: Atlas V USSF-8

Issued: 20 Jan 2022 / 0800L (1300Z)

Valid: 21 Jan 2022 / DURING WINDOW



Forecast Discussion: High pressure centered to our east will bring southerly winds, warmer temperatures, and dry conditions for today's Mobile Launch Platform roll operations. A cold front is forecast to approach Friday, though models generally agree that it will remain to the north of the area through the launch window. At this time, the deepest moisture and best convergence along the front is not expected to reach central Florida until late in the afternoon, thus the Probability of Violation for Friday's launch attempt has been dropped to 30%. Forecast models continue to indicate an area of disturbed weather developing late Friday, resulting in scattered showers and perhaps a thunderstorm overnight. Gusty north winds will develop on the system's backside and there is increasing concern for a Thick Cloud Layer Rule violation during the backup window as low- to mid-level moisture is expected to linger into Saturday afternoon.

Launch Day	Probability of Violating Weather Constraints					
	30%	Primary Concerns: Cumulus Cloud Rule, Thick Cloud Layer Rule				
	Weather Conditions					Additional Risk Criteria
	Weather/Visibility:	None / 7 mi.	Clouds			
	Temp/Humidity:	73°F / 68%	Type	Coverage	Base (ft)	Tops (ft)
24-Hour Delay	Ground Winds (230'):	360° 5 - 9 knots	Cumulus	Scattered	2,500	8,000
			Cirrostratus	Broken	18,000	22,000
						Solar Activity: Low
	Probability of Violating Weather Constraints					
	40%	Primary Concerns: Thick Cloud Layer Rule				
	Weather Conditions					Additional Risk Criteria
	Weather/Visibility:	None / 7 mi.	Clouds			
	Temp/Humidity:	64°F / 62%	Type	Coverage	Base (ft)	Tops (ft)
	Ground Winds (230'):	360° 18 - 24 knots	Cumulus	Broken	2,500	8,000
			Altocumulus	Broken	12,000	16,000
Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear and solar activity.						
Next Forecast Will Be Issued		As Needed				